

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (original) An olefin oligomerization process comprising:
  - (a) contacting a feedstock comprising one or more C<sub>2</sub> to C<sub>6</sub> n-olefins and from about 0.1 wt% to about 25 wt% of an iso-olefin under oligomerization conditions with surface-deactivated ZSM-23 to produce an oligomerized olefin product; and
  - (b) separating from said oligomerized olefin product a C<sub>12</sub>+ fraction containing less than 0.5 atom% of quaternary carbon atoms.
2. (original) The process according to claim 1, wherein said feedstock contains about 0.5 wt% to about 5 wt% of an iso-olefin.
3. (currently amended) The process according to claim 1 ~~or claim 2~~, wherein said iso-olefin is iso-butylene and/or iso-amylene.
4. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said one or more n-olefins in the feedstock are selected from propylene, n-butene and mixtures thereof.
5. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said feedstock is the unreacted effluent stream from an MTBE unit.
6. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said feedstock contains less than 100 ppm of dimethyl ether.

7. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said feedstock has a sulfur content of less than 10 ppm.
8. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said ZSM-23 has been surface deactivated with a sterically hindered nitrogenous base.
9. (original) The process according to Claim 8, wherein said sterically hindered nitrogenous base is 2,4,6-collidine.
10. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions include a temperature of about 160 to about 250°C.
11. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions include a temperature of about 190 to about 230°C.
12. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions include a temperature of about 210 to about 220°C.
13. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions comprise a pressure in the range of from about 500 psig (3447 kPa (gauge)) to about 1500 psig (10342 kPa (gauge)).
14. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions comprise a pressure in the range of from about 750 psig (5171 kPa (gauge)) to about 1250 psig (8618 kPa (gauge)).
15. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions comprise a weight hourly space velocity of from about 0.1 hr<sup>-1</sup> to about 4.0 hr<sup>-1</sup>.

16. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions comprise a weight hourly space velocity of from about  $0.2 \text{ hr}^{-1}$  to about  $3.0 \text{ hr}^{-1}$ .

17. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said oligomerization conditions comprise a weight hourly space velocity of from about  $1.75 \text{ hr}^{-1}$  to about  $2.25 \text{ hr}^{-1}$ .

18. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said  $\text{C}_{12+}$  fraction has an average of from about 0.8 to about 2.0  $\text{C}_1\text{-C}_3$  alkyl branches per carbon chain.

19. (currently amended) The process according to ~~any preceding~~ claim 1, wherein said  $\text{C}_{12+}$  fraction has an average of from about 0.8 to about 1.3  $\text{C}_1\text{-C}_3$  alkyl branches per carbon chain.

20. (original) A method for producing a long chain alcohol mixture comprising contacting the  $\text{C}_{12+}$  fraction produced by the process of any preceding claim with carbon monoxide and hydrogen under hydroformylation conditions and in the presence of a hydroformylation catalyst.

21. (currently amended) A method for producing an alkylaromatic compound comprising contacting an aromatic compound with the  $\text{C}_{12+}$  fraction produced by the process of ~~any one of claims~~ claim ~~1 to 19~~ under alkylation conditions and in the presence of an alkylation catalyst.

22. (original) A method for preparing an alkylaryl sulfonate by sulfonating the alkylaromatic compound produced by the method of Claim 21.